PENNSYLVANIA DEPARTMENT OF HEALTH
2018 - PAHAN–396–01-16 - ADV
Pennsylvania Department of Health Requests Voluntary Reporting of Suspected Acute Flaccid Myelitis (AFM) Cases

DATE:	January 16, 2018
TO:	Health Alert Network
FROM:	Rachel Levine, MD, Acting Secretary of Health
SUBJECT:	**Pennsylvania Department of Health Requests Voluntary Reporting of Suspected Acute Flaccid Myelitis (AFM) Cases**
DISTRIBUTION:	Statewide
LOCATION:	Statewide
STREET ADDRESS:	Statewide
COUNTY:	Statewide
MUNICIPALITY:	Statewide
ZIP CODE:	Statewide

This transmission is a "Health Advisory" provides important information for a specific incident or situation; may not require immediate action.

SUMMARY

Since August 2014, Centers for Disease Control and Prevention (CDC) has received an increased number of reports of suspected acute flaccid myelitis (AFM). To date, no single pathogen has been consistently detected in these cases. Clinicians are encouraged to maintain vigilance for cases of AFM among all age groups and to **report cases of AFM to the Pennsylvania Department of Health** (DOH). Reporting of cases will help states and CDC monitor the occurrence of AFM and better understand factors possibly associated with this illness.

BACKGROUND

AFM is a type of acute flaccid paralysis characterized by an acute or subacute onset of flaccid limb weakness, sometimes accompanied by cranial nerve dysfunction (such as facial drooping or difficulty speaking). In most cases, distinctive lesions primarily in the gray matter of the spinal cord are seen on neuroimaging. Most AFM patients are children. Since August 2014, CDC became aware of an increased number of people across the United States with AFM for which no cause could be found. Since then, CDC has actively investigated AFM. From January through December 2016, 144 persons from 37 states met the Council of State and Territorial Epidemiologists (CSTE) case definition for confirmed AFM cases. In the U.S. there was an increase in reports of confirmed AFM cases in 2016 compared with 2015. In 2015, 21 people were confirmed to have AFM which occurred in 16 states across the U.S. In Pennsylvania during 2016, five persons were confirmed with AFM by CDC. The five confirmed Pennsylvania cases in 2016, had a median age of 2 years (range, 1- 4 years). To date, no single pathogen has been consistently detected in cerebrospinal fluid (CSF), respiratory specimens, stool, or blood at either CDC or state laboratories.

RECOMMENDATIONS

In response to the increase in the number of reports of suspect AFM, DOH recommends the following:

- CASE REPORTING: Clinicians should report suspected cases of AFM to the DOH through the PA-NEDSS online application at https://www.nedss.state.pa.us.
    - Reports from suspect cases of AFM will be submitted to CDC for determination of case status (i.e., confirmed, probable, not a case).
    - DOH will work with clinicians to coordinate the submission of specimens and copies of spinal cord and brain MRI reports to CDC.
- LABORATORY TESTING: Clinicians should collect specimens from patients suspected of having AFM as early as possible in the course of illness (preferably on the day of onset of limb weakness).
- The following specimens should be collected: **CSF; whole blood; serum; stool; upper respiratory tract specimens, preferably nasopharyngeal or nasal mid-turbinate plus oropharyngeal swabs** (https://www.cdc.gov/acute-flaccid-myelitis/hcp/specimens.html).
    - Please note: Collection of stool is required for AFM surveillance. Two stool specimens should be collected at least 24 hours apart early during the course of illness to rule out poliovirus infection.
- CONFIRMATORY LABORATORY EVIDENCE: a **magnetic resonance image (MRI)** showing spinal cord lesions largely restricted to gray matter and spanning one or more vertebral segments.
    - If suspect cases are determined by CDC to meet the AFM case definition, DOH will work with clinicians to facilitate submission of remaining samples of these specimens to CDC for additional testing. Additional instructions regarding specimen collection and shipping can be found at: http://www.cdc.gov/acute-flaccid-myelitis/hcp/instructions.html.
    - DOH will conduct a 60-day follow-up of confirmed and probable AFM cases. CDC's AFM surveillance team will communicate final case classifications back to DOH for dissemination to clinicians, patients, and families.
- Information to help clinicians and public health officials manage care of persons with AFM that meet CDC's case definition was posted in 2014 and can be found at: http://www.cdc.gov/acute-flaccid-myelitis/downloads/acute-flaccid-myelitis.pdf.

2017 CSTE Standardized Case Definition for AFM
Clinical Criteria
An illness with onset of acute flaccid limb weakness

Laboratory Criteria

- Confirmatory Laboratory Evidence: a magnetic resonance image (MRI) showing spinal cord lesions largely restricted to gray matter[*†] and spanning one or more vertebral segments

- Supportive Laboratory Evidence: cerebrospinal fluid (CSF) with pleocytosis (white blood cell count >5 cells/mm3)

Case Classification

Confirmed:

- Clinically compatible case AND
- Confirmatory laboratory evidence: MRI showing spinal cord lesion largely restricted to gray matter*† and spanning one or more spinal segments

Probable:

- Clinically compatible case AND
- Supportive laboratory evidence: CSF showing pleocytosis (white blood cell count >5 cells /mm3)

* Spinal cord lesions may not be present on initial MRI; a negative or normal MRI performed within the first 72 hours after onset of limb weakness does not rule out AFM. MRI studies performed 72 hours or more after onset should also be reviewed if available.
† Terms in the spinal cord MRI report such as "affecting mostly gray matter," "affecting the anterior horn or anterior horn cells," "affecting the central cord," "anterior myelitis," or "poliomyelitis" would all be consistent with this terminology.

Comment

To provide consistency in case classification, review of case information and assignment of final case classification for all suspected AFM cases will be done by experts in national AFM surveillance. This is similar to the review required for final classification of paralytic polio cases.

FOR MORE INFORMATION

- CSTE AFM POSITION STATEMENT 17-ID-01:

  HTTP://C.YMCDN.COM/SITES/WWW.CSTE.ORG/RESOURCE/RESMGR/2017PS/2017PSFINAL/17-ID-01.PDF
- Job Aid for clinicians: how to send information about a suspected AFM case to the CDC
  https://www.cdc.gov/acute-flaccid-myelitis/downloads/job-aid-for-clinicians.pdf

Categories of Health Alert messages:
Health Alert: conveys the highest level of importance; warrants immediate action or attention.
Health Advisory: provides important information for a specific incident or situation; may not require immediate action.
Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of January 16, 2018 but may be modified in the future.